

Abstract

An aluminum nitride sintered body contains aluminum nitride as a main component, at least one rare earth metal element in an amount of not less than 0.4 mol% and not more than 2.0 mol% as calculated in the form of an oxide thereof and aluminum oxide component in an amount of not less than 0.5 mol% and not more than 2.0 mol%. Si content of the sintered body is not more than 80 ppm and an average particle diameter of aluminum nitride grains is not more than 3  $\mu$ m. The aluminum nitride sintered body hardly peels aluminum nitride grains and exhibits high resistivity of at least  $10^8$   $\Omega\cdot\text{cm}$  even in a high temperature range of, for example, 300-500°C, as well as relatively high thermal conductivity.